

[J. H. Marshall]

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J. H. Marshall (white),

Cashiers, N. C.

Mechanic.

Douglas Carter, writer.

THE INVENTOR Original Names Changed Names

J. H. Marshall Buck Sanders C9 - [?]

THE INVENTOR

"My motor will revolutionize the airplane industry - if I ever get it built," said Buck Sanders, mechanic. "It's got everything they've been looking for: small size, great power, cheap fuel, everything. I'm just afraid someone will beat me to it, like everything else I have invented."

Buck is short, blond, and wiry, and his head is unusually large. Few stores have hats large enough for him, and he seldom wears one. He is very muscular, and walks on the sides of his feet, with toes turned out. Each new pair of shoes becomes quickly misshapen. He was born in 1905, the third of eight children, five boys and three girls. In his early days he drove a delivery wagon for a grocer, but he soon became interested in the automobile business, learned the mechanical side of it, and, with two minor exceptions, has followed it ever since. He is known as an expert mechanic. He did not do well in school, and dropped out after spending three years in the seventh grade. He now operates a small filling station and garage in a remote mountain section that attracts many tourists.

"Valves cause most of the trouble today with gasoline motors, but my motor doesn't have any valves. A lot of power is lost in the average motor because the valve springs have to be very stiff, and it takes power to overcome the tension when the valve opens. I'm doing away with all that. My motor works on an entirely new principle. I've seen every kind of motor now in use, and there's nothing on the market like mine. I use gears, too, in the motor itself, and if it is ever used for automobiles and trucks, there won't have to be any transmission used with it. It'll be powerful enough to be [connected?] direct with the wheels all the time. It can be made to burn almost any fuel: from crude oil on up."

"Something like a Diesel engine?"

"No. It's nothing like the Diesel, except that it can be made to burn low-grade fuel. It would almost burn sawdust!"

"You said, 'If I ever get it built.' How do you know it will do those things, if you haven't built it?"

"Because I know machinery. I've designed the motor, and I've gone over the design 20 or 30 times trying to find some flaw or mistake, and there isn't any. I'm trying to get a working model built, but it's a slow job, without any money. If I had the time, and the money - about \$1,000 would do it - I could have a model built and patented in no time at all. Well, it would take a month or so. All the parts have to be made by hand, you know. It'll make me a millionaire, if someone doesn't beat me to it. It's really very simple, and I don't know why someone hasn't built it already. Its simplicity is one of its main features. There's nothing complicated at all about it. Nothing to give trouble. No delicate parts."

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"In 1928 I invented an automatic carburetor choke for automobiles. Very few drivers know how to use the choke right, and one day it dawned on me that a perfectly simple choke could be made to operate automatically, beyond the driver's control. I was working for

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John Bryson at the time, and you know he was supposed to be the best mechanic in town. I told him about my idea, and he just laughed. He didn't laugh at the idea of the automatic choke - I didn't mean that. He laughed at the way I planned to solve the problem. In other words, he said it wouldn't work. He could see that an automatic choke would be a good thing, but he couldn't see that I had invented one. It discouraged me. I thought maybe he was right. He knew more about those things than I did, then, or so I thought. So I gave it up for a while. But I kept thinking about it, and I couldn't see any reason why it shouldn't work. I made up my mind to build one, and try it on my own car. I worked on it in my spare time, but before I got it finished, the same thing was patented by somebody else, and was brought out on the Farmobile! Identically the same thing! John didn't have much to say when he saw it. Today, about half the cars on the market have that choke - half the new ones, I mean. Just about all the expensive cars have it. The man who patented it is rich, and I thought of it two years before he did! At least, I thought of it two years before it came out. If I had gone ahead when I first thought of it, I wouldn't be here today, I'd be sailing around somewhere in my yacht. And when I get my motor built, if I'm not too late, I'm going to build a platform up on the public square, and I'm going to stand there and tell a lot of the dirty ——— around town what I think of them!"

It seems that Buck has had several serious disagreements with people in the automobile business in the town where he was born, and where he has spent most of his life. His last important job there was given up because the owner of the business interfered with the management of the repair shop. Buck was the service manager, but he was not given a free hand.

As a young man, about 18, he was employed to drive a wealthy man and his wife to Palm Beach, and they liked him so well they wanted to adopt him, but he refused. He liked them, too, but he did not care to be their adopted son. He lived with them a few months, and then got a job as a helper in a garage. He worked his way up to a mechanic's position, but in about a year he tired of Florida, and returned to his home. He immediately scoured a job as a mechanic, and built up a good reputation for efficiency. Later, for a few months, he

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engaged in a mining enterprise with two other men, but it was unsuccessful. At another time he became interested in aviation, and learned to fly. Three of his brothers are aviators (or were: one was killed in an accident).

For many years Buck was the man to whom other mechanics brought their troubles when they could not solve them. Buck never failed. No job was too tough or too complicated for him. About five months ago, in October, he learned of a place in the mountains about 65 miles away where there is a small permanent settlement and a rather large number of automobile tourists during the [warmer?] months. The man who has been operating the filling station and garage there was anxious to sell out, so Buck got what money he could - some of it had to be borrowed - and bought the business.

"It's been pretty hard this winter," he said, "but I managed somehow to keep going, and I expect to make some real money this summer. Enough to finish my motor, I hope. I've had to get those mountaineers in the habit of bringing their cars and trucks to me when they need repairs, and that made it necessary to do a lot of work that I didn't make anything on, but it'll pay me in the end. Before I went out there, when a man's car or truck broke down he tried to fix it himself, usually with mail-order parts, but I've got them coming to me now. There are a good many cars and trucks in that country, and the nearest other garage is 12 miles away, across a high mountain ridge in another county. It's not much of a garage, either. The mechanics are just country boys, with very little experience, and I've even got them sending work to me. My idea is to just get along the best I can during the cold part of the year, and then make my year's profit during the tourist season. Tourists pay cash, you know, and most of them are used to city prices. I'll make some money this summer, all right. The tourists are already beginning to come. Last Sunday there were at least 200 cars from other states, and I pumped gas all day long. Nobody needed any repairs, but there'll be plenty of that in time. Just wait until those flat-country cars get up in the mountains and begin to go haywire!

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"I might even make some money next winter. I'm showing those natives out there that they can get just as good service at my place as they can in town. I charge them reasonable prices, and do my best work, of course, and I believe by next winter I'll have all the business in the southern part of the county. They can't do any good fixing their own cars, anyhow. I can save 'em time and money, and give 'em more satisfaction, and they're beginning to catch on. That fellow I bought the place from wasn't even a mechanic? He was unpopular, too. I'm making friends with everybody out there. I'm beginning to get some welding business, too. Those farmers are bringing me their broken plows and things to weld, and last week a woman got me to braze a cowbell! Oh, I'll get along all right, even if somebody does beat me to that motor!"

"Didn't you mention some other inventions, too?"

"Well, I thought of the electric razor about five years before it was patented. I didn't give up the idea of building one until it came on the market, but it was naturally too late then. My idea was the one they used, but there wasn't anything I could do about it after they patented it. I've got an awfully tough beard: my whiskers are just like wire. Very few barbers have razors good enough to give me a clean shave without tearing my face up, so I usually shave myself, but it's a mean job, even with a good razor. One day in a barber shop I got to looking at an electric hair clipper, and just for fun, I tried it on my 7 beard. It didn't work very good, but right then I said to myself, 'Why couldn't a fellow use the same principle and build an electric razor that would shave closer?' Well, that's exactly what they did. All the electric razors on the market use that same principle. There are some slight differences in the details, but the principle is the same.

"Then, about a year ago, I thought of an electric toothbrush. Something that would clean the teeth and give the gums the proper massage. Everybody laughed at that! They thought it was a good joke, but it hasn't been two months since one was patented! Didn't you

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see that picture in the paper, showing the Hollywood actress trying out the new electric toothbrush?”

“No, but I saw a picture in the paper this morning that might interest you. It is a picture of a 'mystery motor' built in California for a new military airplane. It weighs 412 pounds, develops 500 horsepower, and only uses eight gallons of third-grade gasoline per hour at cruising speed.”

“ What ?” It was a shout.

“That's right. What does your motor look like?”

“What the hell does that California motor look like?”

“It's rather flat, and circular, and seems to have two sets of cylinders, but you can't tell very much about it from the picture.”

“Great God Almighty! My motor! But maybe not. Maybe not. My motor that size ought to turn up 1,000 horsepower.